

longer be neglected, but cultivated as far as they are capable, and made by sound instruction as valuable to the person as their other educated faculties are. This is true philosophy, and though it comes somewhat late, yet better late than never. The rising generation will by such additional sound instruction be made a superior set of beings, as they will have several more highly important faculties cultivated than others in their early years have had, such mental powers being then considered of no importance, and not given by the Creator for specific purposes. It is now stated openly and boldly by those learned noblemen, that those faculties must be duly cultivated, that the human mind may be perfected according to its peculiar and individual nature. If this important point is kept in view and acted upon as it ought to be, we shall have the human race approaching originality, and not spoiled by being forced to receive what they cannot, or suffered to remain apathetic and inactive for the want of a due exercise. In fact, the whole mind should be as well exercised as the whole body. The right principles are resorted to for strengthening the body, but only partially as for strengthening the mind. No expense is spared, nor time, nor labour, for improving the physical condition of man and animals; but for perfecting the intellect, the right consideration has not been given.

And why should the different branches of the arts be slurred over as they so generally are in educational establishments? Are we to rest satisfied that form and colour are only worth an exercise of accomplishments, and that constructiveness is unworthy of a legitimate exercise in the different schools? Let any one who has a common understanding of those faculties, examine the drawings as they are called, that the pupils of both sexes bring home half-yearly, and they must conclude that so much paper, pencil, and colour had been destroyed; the mind injured, time wasted, and money thrown away. Such a loss of intellect is exceedingly discreditable to an intellectual nation. Our foreign neighbours do not set in this slovenly way in artistic instruction; but we do not like to adopt that which is good in our foreign neighbours' educational systems, because they emanate from despotism. Let us take the good from all, and leave the despot qualities where we find them. It is evident enough that we are not right, or our manufactured goods would not be so defective in all artistic points as they are in form, and colour; and particularly as regards colour—the most frightful arrangements and contrasts are made. Indeed, they are too often so devoid of harmony, that on beholding such discordant and outrageous colours, we can hardly consider them as the productions of a civilized nation. That such unnatural and ignorant productions are the result of uncultivated minds in form and colour, there can be no doubt, and why those mental powers should be allowed to be so falsely exercised is this,—the producers of such intellectual wares are ignorant of the principles on which such articles ought to be produced. They know not what are the proper and harmonious arrangements and contrasts, the apparent forms, light and shadow, texture, and the rules for producing them. Now, if the master manufacturers are not soundly informed upon these subjects, and therefore cannot pass a correct judgment upon their own goods, they must be left to the designer, who may have been incorrectly exercised in harmony of colour and truth of form. The master manufacturers ought to be masters of their art, and obtain sound artistic instruction, that they may know how their goods should be produced in true form and colour; they would then see that a true foundation should be laid to the minds of their designers, that they may produce such designs as would be in harmony with the minds of the purchasers, instead of their being disagreeable and painful, as they often are. That such bad art is being daily produced, the goods in our shops unfortunately show. To correct this evil, sound instruction can only effect the cure. Design which is invention will never be attained but upon a true foundation. Truth must be the beginning and the end, and geometrical construction must be the commencement of instruction in either branch of the arts, that the science of perspective may be well understood, for without such truth invention will never appear nor accuracy

of form be attained. There is no greater folly than pretending to draw without this foundation, and though geometrical construction and perspective is the true foundation on which the drawing of all forms must be based, they must be taught in reference to real objects. All instruction should be given upon principles immediately derived from nature, when its application should be shown upon models or natural objects, and explained clearly in order to prove the truth of those principles. Without this knowledge, the student must expect to be always in confusion; and it is in consequence of the want of this valuable information that there are so many works of art that are false representations published, which is an evil of great magnitude, abusing the public mind by inducing it to believe in error instead of the truth, which to the uninitiated must work a serious injury, as all falsehoods will do wherever they are brought forward for public approval and encouragement. But the rising generation will not much longer be corrupted by false art, so they are to have their mental powers soundly exercised in artistic matters, and to a certain extent they will in time possess a certain judgment, and be enabled to distinguish accuracy from inaccuracy, which will oblige the producers of inaccurate art to become accurate, and no longer to abuse the public mind with their mischievous pretensions.

THE GRANITE ROCKS OF EGYPT.

THE following facts in respect to the progress of discolouration on the rocks which are exposed to the current of the Nile at the cataracts, form an interesting sequel to the observations regarding the effects of time on the granite quarries of Syene.

From E'Sunna to the Island of Philæ, the bed of the Nile is encumbered with huge masses of granite, water-worn, and broken into separate piles of enormous boulders, which, shooting up from the level of the river to a conical form, look like giant cairns built up in the stream by some monster hands.

The surfaces of these rocks at their base, where they are washed by the river, are tinged of a dark brown colour, gradually increasing in intensity from the highest point reached by the inundation to the ordinary level of "low Nile." On examination, they are found to be covered with a very thin coating of a dark matter which adheres with the utmost tenacity to the rock. Humboldt and Darwin make mention of a similar appearance in other parts of the world; the latter gentleman having observed it near the city of Bahia at a point where a rivulet entered the sea. On this subject he remarks in his "Voyage of the Beagle," p. 12, "At the cataracts of the great river Orinoco, Nile, and Congo, the Syenitic rocks are coated by a black substance, appearing as if they had been polished with plumbago. The layer is of extreme thinness; and on analysis by Berzelius, it was found to consist of the oxides of manganese and iron. In the Orinoco, it occurs on the rocks periodically washed by the floods, and in those parts alone where the stream is rapid; or as the Indians say, 'The rocks are black where the waters are white.' It cannot be doubted, that the cause of this discolouration is the contact of the water, and that probably it is produced by the adherence of certain of the particles with which the river is charged."

To the north-east of the Island of Philæ, there is a remarkable rock which forms a very prominent object in the landscape. It is a large isolated mass attached to the eastern bank of the river, and presenting a solid surface towards the island. This surface is sculptured with hieroglyphics, among which are several royal seals or names of kings, on an large a scale as almost to be legible from Philæ. Several of these sculptures have been carefully defaced, and this in some instances has evidently been done for the purpose of substituting a new name in the place of the original characters—a circumstance which proves that these were looked upon as monuments of some consideration. I recognised the names of Thothmes III., generally considered to be the Pharaoh of the Exodus, of Psammetik I., and of Psammetik II.

* The discoloured part was
9. From a Journal by Lieut. J. H. Mueset, still unpublished, of a
series of travels with Lord Esmeir, to the Turkish and other
dominions—Egypt, Syria, Palestine, the Isles of the Red Sea, &c.

The surface of the rock where those names are cut partakes of the dark colour communicated by the waters of the Nile, but being situated at a pretty high level, the colour is not of the darkest hue, as the Nile reaches so far only during the height of the inundation. The sculptured surfaces, however, hardly partake at all in the discolouration, although they have been exposed to the operation of the same causes since they were chiselled; indeed, it is this remarkable difference in colour that makes the sculptures so conspicuous at a distance. In the case of the name of Thothmes III., no less than 3,340 years have elapsed since the date of its execution. If, then, no effect has been produced in upwards of 3,000 years, how many ages would be required to produce that degree of discolouration which amounts to an absolute black?

These and the former observations on the quarries of Syene, prove distinctly that whatever alteration may have taken place comparatively recently on the surface of the earth in other parts, no very material change has been produced in the valley of the Nile for countless ages. The facts regarding the formation of the Delta of the Nile and the "petrified forest" near Cairo, lead to the same irrefragable conclusion: "In America, so in Europe," says Mr. Lyell in his "Travels in America," "the oldest monuments of human labour are as things of yesterday, in comparison with the effects of physical causes which were in operation after the existing continents had acquired the leading features of hill and valley, river and lake, which now belong to them."

ARMY AND NAVY CLUB. DECISION OF THE COMMITTEE.

Our readers will remember that six architects were ultimately selected by the committee to submit designs for the new club-house. One of the six, namely, Mr. Clark, having been forced by an accident to decline competing, Mr. Selwio was named to supply his place, and accordingly sent in drawings. The committee after examining all the plans, selected one by Messrs. Parnell and Smith, concerning which a letter from Colonel D'O'Orsay appeared in our columns, and referred it to Mr. John Shaw, one of the official referees, to report upon it. The report was satisfactory, and Messrs. Parnell and Smith have been commissioned to proceed. The elevation is based upon that of a well-known palace by Sansovino.

THE LATE MR. D. MUSHET.—A somewhat curious paper warfare, in the shape of advertisement and counter advertisement, has of late been unhappily waged between divers representatives of Mr. Mushet, whose lamented demise we recently noticed. Subscriptions have been repeatedly solicited by "A friend of the family," towards the support of Mrs. Mushet and two grandchildren, the late Mr. Mushet having been too ardently devoted to science to pursue his own exclusive interest. . . . Not doubting that his country would handsomely provide for them he left behind. . . . Donations, owing to 'unhappy circumstances,' to be addressed to the widow direct, or to her youngest son. But as repeatedly have such solicitations been repudiated by the eldest son of the deceased, who declared them to be totally uncalled for and unnecessary, as well as derogatory to his father's name and memory. . . . Lastly, too, the acting executors of Mr. Mushet, Messrs. Charles Frederic Cliffe and George Roberts, have also denounced, 'with pain,' the 'solicitation of contributions from the public in behalf of the alleged destitution of his widow and her grandchildren'; the advertisement in question being "calculated to deceive the public grossly, by leaving contributions, as a testimony to Mr. Mushet's eminent services in metallurgy, upon the false supposition that he has left a portion of his family without due provision for their maintenance. That on the contrary, Mr. Mushet, in his will, has made an ample provision for all the members of his family, to whom he has bequeathed a handsome property; and that Mr. Upton, who, upon erroneous information, first inserted the advertisement, has withdrawn his sanction to its further appearance; while Mr. Bald never, at any time, authorized his name to be attached to it."

* See p. 354, col.